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**Patent** [19]

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## [54] AIR PURIFYING METHOD

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## [57] ABSTRACT

**PROBLEM TO BE SOLVED:** To enhance deodorizing efficiency by a photocatalyst by lowering moisture in polluted air before air purifying treatment when a harmful substance contained in air of a waste disposal treatment plant is decomposed and removed by the photocatalyst and subsequently purifying polluted air by the photocatalyst.

**SOLUTION:** Moisture coexisting in polluted air before receiving air purifying treatment is removed, polluted air is purified by a photocatalyst to highly efficiently decompose and remove a harmful substance in air by the photocatalyst. As the photocatalyst, titanium oxide is optimum for the use in a living space from an aspect of structural stability, photo-reactive harmful substance or safety. It is pref. that the relative humidity before the dehumidification treatment of polluted air is 60% or more and the relative humidity before air purification by the photocatalyst after dehumidification is 45% or less. Further, the relation between the absolute humidity A (g/m<sup>3</sup>) before the dehumidification treatment of polluted air and the absolute humidity B (g/m<sup>3</sup>) before air purification by the photocatalyst is pref.  $A/B \leq 1.5$ .

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